



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,732	10/29/2003	Bunzo Seki	HGM-118-A	6302
21828	7590	10/06/2005		
CARRIER BLACKMAN AND ASSOCIATES 24101 NOVI ROAD SUITE 100 NOVI, MI 48375			EXAMINER BROWN, DREW J	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HL

Office Action Summary

Application No.

10/696,732

Applicant(s)

SEKI, BUNZO

Examiner

Drew J. Brown

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Specification

1. The disclosure is objected to because of the following informalities: In line 1 of paragraph 1, "present invention relates suspension arms" should be "present invention relates to suspension arms." In line 7 of paragraph 13, the sentence beginning with "*" is not a complete sentence. In line 9 of paragraph 59, the parenthesis after "186" should be deleted. Also, both figures 6(a) and 6(b) need to be included in the brief description of the drawings.

Appropriate correction is required.

Claim Objections

2. Claim 1 is objected to because of the following informalities: The verb "are" in line 3 on claim 1 should be "is." A comma is needed after "flange" in line 7 and after "hole" in line 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dangauthier (U.S. Pat. No. 3,431,035) in view of Vogelgesang (U.S. Pat. No. 6,619,851 B2).

Dangauthier discloses a structure for use in attaching a suspension arm to a frame bracket (3 and 3'), in which a cylindrical hole (hole inside of suspension arm 1) is bored in one end of the suspension arm (1), and a bearing (13) is inserted into the cylindrical hole. A pair of spacer collars (9, 10, 12, 14, and, 9', 10', 12', 14') is inserted into the ends of the cylindrical hole for

Art Unit: 3616

regulating movement of the bearing, and a sealing member (11) is interposed between the spacer collars and the cylindrical hole. One end of the suspension arm is installed to the frame bracket by means of a bolt (16) inserted through the bearing and the pair of spacer collars.

Dangauthier, however, does not disclose that one end of each of the spacer collars has an integral flange with a larger outer diameter than an inner diameter of the cylindrical hole, and that this flange substantially covers the cylindrical hole. However, Vogelgesang does disclose a flange (42) having an outer diameter larger than an inner diameter of the cylindrical hole, which covers the cylindrical hole and prevents foreign matter from entering the bearing assembly.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flange portion (14 and 14') of Dangauthier such that it comprised an integral flange having a larger diameter than an inner diameter of the cylindrical hole as claimed in view of the teachings of Vogelgesang in order to protect the bearing assembly from foreign matter.

With respect to claims 2 and 3, Dangauthier in view of Vogelgesang discloses an invention meeting the method limitations. In addition to the invention as discussed above, a nut (15) is threaded onto the bolt, and the flange of each of the spacer collars is substantially transverse to the tube portion (9 and 9') of the spacer collars.

With respect to claims 5-9, Dangauthier in view of Vogelgesang discloses all the individual elements as discussed above but does not disclose that they are collected to form a hardware kit. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to collect the elements to form a hardware kit so all the elements

Art Unit: 3616

are organized and available for installation without having to order separate parts. Also, it would have been obvious to then install the hardware kit onto a vehicle.

In addition to the elements and the characteristics of the elements as discussed above, the outwardly extending flange of the spacer collars also extends radially outwardly from an end portion of the tube portion thereof.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dangauthier in view of Vogelgesang, and further in view of Niwa et al. (U.S. Pat. No. 5,302,032). The combination of the inventions of Dangauthier and Vogelgesang disclose the claimed invention as discussed above, but it does not disclose that the spacer collars are formed of corrosion-resistant material. However, Niwa et al. does disclose that the spacer collars 11 are formed of corrosion-resistant material (column 5, lines 40-44). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Dangauthier and Vogelgesang with the teachings of Niwa et al. to form the spacer collars out of corrosion-resistant material in order to prolong the life of the bearing assembly so it does not need to be replaced as frequently as one with non corrosion-resisting spacer collars.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Solleder (U.S. Pat. No. 4,615,538), Garberg (U.S. Pat. No. 5,211,261), Raj et al. (U.S. Pat. No. 4,898,480), Tennies et al. (U.S. Pat. No. 3,320,007), Nagreski et al. (U.S. Pat. No. 6,783,137 B2), Wagner (U.S. Pat. No. 2,703,709), and Kai et al. (U.S. Pat. No. 6,739,757 B2) all disclose similar structures.

Art Unit: 3616

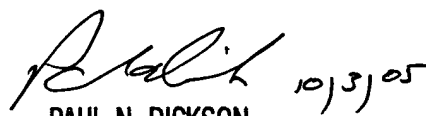
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown
Examiner
Art Unit 3616

DJB


PAUL N. DICKSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600